

CLAIMS:

1 Sub 1 Device for transferring data between two
2 A2 workstations connected to a network, characterized in
3 that it comprises means for distributing said data among
4 a plurality of links of said network.

1 2. Device according to claim 1, characterized in
2 that it comprises a memory for storing said data.

1 3. Device according to claim 2, characterized in
2 that said memory is a dual port memory.

1 4. Device according to claim 2, characterized in
2 that it comprises:

3 - high speed interface for transmitting said data
4 from a workstation to said memory,

5 - associated with each link, a low speed interface
6 for transmitting a part of said data from said memory to
7 said link, and

8 - a controller for monitoring the data flow between
9 said workstation and said plurality of links, by
10 controlling said memory and said interfaces.

1 5. Device according to claim 4 characterized in
2 that, said high speed interface receiving data at an
3 initial rate equal to the sum of the rates at which low
4 speed interfaces transmit on the network, two at least of
5 said low speed interfaces run at different rates.

1 6. Device according to claim 5 characterized in
2 that, each said low speed interface running at a rate
3 which is a fraction of said initial rate, all said
4 fractions having a common denominator and at least one of
5 said fractions being irreducible, the data flow is
6 cyclically distributed among said low speed interfaces in
7 such a way that each low speed interface receives a
8 number of consecutive bytes from said flow equal to the
9 numerator of its associated fraction.

1 7. Device according to claim 4, characterized in
2 that at least one of said low speed interfaces comprises
3 means for establishing a connection with a modem.

1 8. Device according to claim 7, characterized in
2 that said high speed interface comprises means for
3 transferring said data with a modem.

1 9. Device according to claim 2, characterized in
2 that it comprises:

3 - associated with each link, a low speed interface
4 for transmitting part of said data from said link to said
5 memory,

6 - a high speed interface for transmitting said data
7 from said memory to a workstation, and

8 - a controller for, in a first state, monitoring the
9 data flow between said plurality of links and said
10 workstation by controlling said memory and said
11 interfaces.

1 10. Device according to claim 9 characterized in
2 that, said high speed interface receiving data at an

3 initial rate equal to the sum of the rates at which low
4 speed interfaces receive from the network, two at least
5 of said low speed interfaces run at different rates.

1 11. Device according to claim 10 characterized in
2 that, each said low speed interface running at a rate
3 which is a fraction of said initial rate, all said
4 fractions having a common denominator and at least one of
5 said fractions being irreducible, the data flow is
6 cyclically distributed among said low speed interfaces in
7 such a way that each low speed interface receives a
8 number of consecutive bytes from said flow equal to the
9 numerator of its associated fraction.

1 12. Device according to claim 9, characterized in
2 that at least one of said low speed interfaces comprises
3 means for establishing a connection with a modem.

1 13. Device according to claim 12, characterized in
2 that said high speed interface comprises means for
3 transferring said data with a modem.

1 14. Device according to claim 9, characterized in
2 that:

3 - said high speed interface is provided for
4 alternately transmitting other data from said workstation
5 to said memory,

6 - each said low speed interface is alternately
7 provided for transmitting a part of said other data from
8 said memory to said link,

9 - said controller, in a second state, monitoring the
10 data flow between said workstation and said plurality of

~~links.~~

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